業績目録（阿部勝憲）

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阿部勝憲教授業績目録

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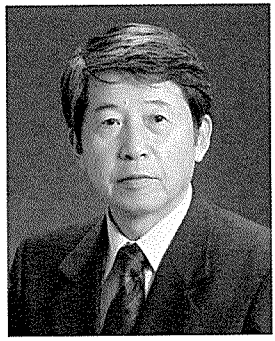

阿 部 勝 憲　教授略歴

生年月日　昭和18年７月27日
本 籍 地　宮城県
職　　名　教授
所　　属　工学研究科量子エネルギー工学専攻

最終学歴

昭和41年３月	東北大学工学部原子核工学科卒業
昭和43年３月	東北大学大学院工学研究科原子核工学専攻修士課程修了

学　　位

昭和56年３月	工学博士（東北大学）

職　　歴

昭和43年４月	東北大学金属材料研究所　助手
昭和58年５月	東北大学金属材料研究所　助教授
昭和62年８月	東北大学工学部　教授
平成９年４月	東北大学大学院工学研究科　教授 （大学院重点化による配置替）
平成19年３月	東北大学大学院工学研究科を定年退職

受　　賞

昭和53年６月	財団法人金属研究助成会　研究奨励金
平成18年３月	日本原子力学会フェロー

学会等における活動

日本原子力学会企画委員会委員（平成３年～平成６年）
日本原子力学会東北支部監事（平成４年～平成６年）
日本金属学会東北支部評議委員（平成５年～平成７年）
日本原子力学会核融合工学部会運営諮問委員（平成５年～平成７年）
プラズマ・核融合学会理事（平成７年～平成11年）
プラズマ・核融合学会企画委員（平成７年～平成11年）
プラズマ・核融合学会委託調査研究特別専門委員会委員（平成13年～平成14年）
日本原子力学会核融合エネルギー連合講演会現地実行委員長（平成15年～平成16年）
日本原子力学会評議委員（平成16年～平成18年）
日本原子力学会東北支部長（平成17年～平成18年）
日本原子力学会2005年秋の大会現地委員長（平成17年）
日本原子力学会理事（平成17年～平成18年）
日本原子力学会総務財務委員会委員（平成17年～平成18年）
日本原子力学会国際活動委員会委員（平成17年～平成18年）
日本原子力学会日韓原子力学生若手研究者交流事業運営連絡会委員（平成17年～平成18年）

社会における活動

日米科学技術協力事業核融合分野 FFTF/MOTA 照射研究計画幹事（昭和62年～平成６年）
核融合炉材料フォーラム幹事（平成２年～平成11年）
日本学術振興会特別研究員等審査会専門委員（平成６年～平成７年）
日本学術会議原子力工学研究連絡委員会委員（平成６年～平成９年）
日本学術会議核科学研究連絡委員会委員（平成６年～平成９年）
日米科学技術協力事業核融合分野研究計画委員会委員（平成７年～平成18年）
ITER/EDA 研究協力委員会委員（平成７年～平成12年）
日米科学技術協力事業核融合分野 JUPITER 計画日本側代表（平成７年～平成12年）
核融合炉材料国際会議国際諮問委員（平成８年～平成18年）
学術審議会専門委員（平成９年）
第８回核融合炉材料国際会議総務委員長（平成９年）
日本学術会議エネルギー資源工学研究連絡委員会委員（平成９年～平成12年）
日本学術会議核工学専門委員会委員（平成９年～平成12年）
日本学術会議核融合専門委員会委員（平成９年～平成12年）
原子力委員会専門委員（核融合会議）（平成10年～平成13年）
核融合会議戦略検討分科会委員（平成10年～平成12年）
原子力委員会原子力試験研究専門委員会委員（平成13年～平成18年）
日米科学技術協力事業核融合分野 JUPITER-Ⅱ計画日本側代表（平成13年～平成18年）
財団法人金属研究助成会評議員（平成14年～平成16年）
原子力平和利用連絡協議会委員（平成14年～平成18年）
第11回核融合炉材料国際会議プログラム委員長（平成15年）
第７回核融合炉工学国際シンポジウム組織委員（平成16年）
第５回核融合エネルギー連合講演会（仙台）現地委員長（平成16年）
日本原子力学会2005年秋の大会現地委員長（平成17年）
ITER 計画推進検討会専門委員（平成17年）

学内における活動

金属材料研究所附属材料試験炉共同利用委員会委員（昭和63年～平成16年）
金属材料研究所附属量子エネルギー材料科学国際研究センター
共同利用委員会委員（平成17年～平成18年）
サイクロトロン・ラジオアイソトープセンター運営委員会専門委員（昭和63年～平成18年）
金属材料研究所附属量子エネルギー材料科学国際研究センター
課題採択専門委員会委員（平成元年～平成18年）
サイクロトロン・ラジオアイソトープセンター第一専門委員会委員（平成元年～平成18年）
サイクロトロン・ラジオアイソトープセンター
課題採択専門委員会委員（平成２年～平成17年）
補導協議会協議委員（平成２年～平成３年）
施設整備委員会青葉山地区協議会協議委員（平成２年～平成３年）
原子理工学委員会教育研究委員会加速器専門委員会専門委員（平成４年～平成８年）
工学部原子核工学科長（平成５年）
工学部量子エネルギー工学科長（平成８年，平成11年，平成14年，平成15年）
工学部機械知能・航空工学科長（平成18年）
工学研究科量子エネルギー工学専攻長（平成18年）
東北大学六ヶ所村センター検討委員会委員（平成18年）

外部機関における活動

九州大学工学部非常勤講師（平成２年～平成３年）
日本原子力研究所核融合炉材料研究委員会専門委員（平成２年～平成７年）
原子力安全研究協会超高燃焼燃料調査専門委員会委員（平成３年～平成５年）
核融合科学研究所共同研究員（平成３年～平成18年）
日本原子力研究所 JMTR 照射研究委員会専門委員（平成７年～平成10年）
日本原子力研究所基礎研究推進委員会専門委員（平成８年～平成10年）
日本原子力研究所核融合炉材料研究委員会委員（平成８年～平成11年）
日本原子力研究所燃料安全研究委員会委員（平成８年～平成10年）
九州大学応用力学研究所非常勤講師（平成９年～平成10年）
科学技術庁金属材料技術研究所研究課題中間評価委員会委員（平成９年～平成10年）
日本原子力研究所原子力材料研究委員会委員（平成10年～平成11年）
核融合科学研究所客員教授（平成10年～平成13年）
日本原子力研究所核融合炉研究委員会委員（平成10年～平成17年）
日本原子力研究所研究評価委員会専門委員（平成11年～平成14年）
日本原子力研究所核融合炉材料研究委員会委員長（平成11年～平成17年）
日本学術振興会特別研究員等審査会専門委員（平成13年～平成15年）
日本原子力研究所研究評価委員会専門委員（平成13年～平成14年）
京都大学エネルギー理工学研究所客員教授（平成15年～平成16年）
核融合科学研究所共同研究委員会委員（平成15年～平成18年）
日本原子力研究所研究評価委員会専門委員（平成16年～平成17年）
核融合科学研究所運営会議外部評価委員会専門委員（平成17年～平成18年）
日本原子力研究開発機構核融合炉工学研究委員会委員（平成18年）
日本原子力研究開発機構核融合炉材料研究専門部会委員長（平成18年）
日本原子力研究開発機構 ITER プロジェクト委員会委員（平成18年）

業　績　目　録

I．著書・編書（共著書等含む）

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26. Radiation Hardening of Vanadium by 14 MeV Neutrons. [J.Nucl.Mater., 141-143, (1986), 855-859]H.Matsui, O.Yoshinari and K.Abe

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43. Mechanical Properties and Microstructures of High-Chromium V-Cr-Ti Type Alloys. 11th International Conference on Fusion Reactor Materials, 2003 年 7 月，京都

44. Initial Oxidation Behavior of V-Cr-Ti Alloys in Low Oxygen-Partial-Pressutre Atmosphere. 11th International Conference on Fusion Reactor Materials, 2003 年 7 月，京都

45. Study of Synergistic Effects of Displacement Damage,Helium and Hydrogen on the Microstructural Development and Mechanical Properties of beta-SiC. 11th International Conference on Fusion Reactor Materials, 2003 年 7 月，京都

46. Effect of He Pre-implantation and Neutron Irradiation on Mechanical Properties of SiC/SiC. 11th International Conference on Fusion Reactor Materials,2003 年 7 月，京都

47. Study on Irradiation Induced Corrosion Behavior in Austenitic Stainless Steel using Hydrogen-Ion Bombardment. 11th International Conference on Fusion Reactor Materials, 2003 年 7 月，京都

48. Study on Irradiation Performance and System Integration of Advanced Blanket through JUPITER-Ⅱ Program 4th General Scientific Assembly of Asia Plasma & Fusion Association, 2003.10, Hangzhou, China

49. Material Issues of SiC and SiC/SiC Composites for Fusion Applications and Their Irradiation Behavior after Multi-Ion-Beam Bombardment. Materials for Advanced Energy Systems and Fissions & Fusion Engineering, 2004 年 10 月，仙台

50. Neutron Irradiation Behavior W and W-Re Alloys. Materials for Advanced Energy Systems and Fissions & Fusion Engineering, 2004 年 10 月，仙台

51. Evaluation of Ideal Strength of Metal-Ceramics Interface using First-Principles Calculation. Materials for Advanced Energy Systems and Fissions & Fusion Engineering, 2004 年 10 月，仙台

52. Effects of Solid Transmutation Elements on Defect Structure Development of W using W-Re and W Re Os Model Alloys. 12th International Conference on Fusion Reactor Materials, 2005 年 12 月, California U.S.A.

53. Effects of microstructure on exfoliation and blistering behavior of various W by He implantation at about 500C. 12th International Conference on Fusion Reactor Materials, 2005 年 12 月, California U.S.A.

54. Anodic polarization properties of V-Cr-Ti type alloys for fusion applications. 12th International Conference on Fusion Reactor Materials, 2005 年 12 月, California U.S.A.

55. Evaluation of Interfacial Strength between Yttrium Oxides and Vanadium. 12th International Conference on Fusion Reactor Materials, 2005 年 12 月, California U.S.A.

56. Effects of Si, Al and Y Additions on Neutron Irradiation Behavior of V-Cr-Ti type Alloys. 12th International Conference on Fusion Reactor Materials, 2005 年 12 月, California U.S.A.

57. Material Compatibilities Studies between SiC and Solid Breeding Materials for High-Temperature Gas Cooling Blanket System. 12th International Conference on Fusion Reactor Materials, 2005 年 12 月, California U.S.A.

58. Influence of Cr and Ti Content on Compatibility of V-Cr-Ti Type Alloys with Liquid Lithium. 12th International Conference on Fusion Reactor Materials, 2005 年 12 月, California U.S.A.

Ⅴ. 国際会議の主宰など

1. Fifth International Conference on Fusion Reactor Materials (1991 年 11 月 17 日－ 1991 年 11 月 22 日, USA, Clearwater) [主催]Organizing Committee

2. Second Japan/China Symposium on Materials for Advanced Energy System & Fission and Fusion Engineering (1994 年 6 月 5 日－ 1994 年 6 月 8 日, Japan, Tokyo) [主催] 組織委員

3. IEA/JUPITER Joint Symposium on Small Specimen Test Technologies for Fusion Research (1996 年 3 月 13 日－ 1996 年 3 月 16 日, Japan, Tougatta, Miyagi) [主催] 組織委員長

4. 第4回核融合炉工学国際シンポジウム（1996年4月－1996年5月）［運営］国際運営委員

5. Forth Japan/China Symposium on Materials for Advanced Energy System & Fission and Fusion Engineering（1996年8月25日－1996年8月28日, Japan, Sapporo）［運営］組織委員

6. IEA International Symposium on Refractory Metals and Alloys for Fusion Applications（1996年10月28日－1996年10月30日, Switzerland, Villingen）［主催］Organizer

7. Eight International Conference on Fusion Reactor Materials（1997年10月26日－1997年10月31日, Japan, Sendai）［主催］総務委員長

8. Japan-USA Joint Planning Meeting on Component Materials System for Fusion（1998年6月15日－1998年6月16日, USA, Seattle）［主催］日本側キーパースン

9. Fifth Japan/China Symposium on Materials for Advanced Energy Systems and Fission and Fusion Engineering（1998年11月2日－1998年11月4日, China, Xi'an）［主催］共同議長

10. Japan-USA Joint Planning Meeting on Advanced Blanket and Materials System（2000年6月1日－2000年6月2日, USA, Bethesda）［主催］日本側キーパースン

11. ISRE 2000 Satellite International Symposium on Irradiation Effects and Related Subjects of Nuclear Materials using Particle Beam（2000年8月24日－2000年8月25日, Japan, Sendai）［主催］議長

12. IEA/JUPITER-Ⅱ Joint International Workshop on Liquid Blanket and Low Activation Materials System（2001年5月21日－2001年5月23日, Japan, Sendai）［主催］議長

13. Eighth Japan-China Symposium on Materials for Advanced Energy Systems and Fission and Fusion Engineering（2004年10月4日－2004年10月6日, 日本国, Sendai）［主催］議長